2010 DGAC Conclusion Grading Chart

The 2010 Dietary Guideline Advisory Committee approved the use of the following predefined criteria to grade the strength of the evidence supporting each conclusion statement. These criteria guided members to carefully evaluate the:

- quality of studies (both strength of design and execution),
- quantity of studies and subjects,
- consistency of findings across studies,
- the magnitude of effect,
- generalizability of findings

reported in the body of literature supporting each conclusion. The chart below was used by the 2010 Dietary Guidelines Advisory Committee and defines the criteria used to determine each grade.

DGAC Conclusion Grading Chart used to evaluate the strength of the body of evidence supporting conclusion statements

Elements	Strong	Moderate	Limited	Expert Opinion Only	Grade Not Assignable
Quality • Scientific rigor and validity • Study design and execution	Studies of strong design Free from design flaws, bias, and execution problems	Studies of strong design with minor methodological concerns OR only studies of weaker study design for question	Studies of weak design for answering the question OR inconclusive findings due to design flaws, bias, or execution problems	No studies available Conclusion based on usual practice, expert consensus, clinical experience, opinion, or extrapolation from basic research	No evidence that pertains to question being addressed
Consistency • Consistency of findings across studies	Findings generally consistent in direction and size of effect or degree of association, and statistical significance with minor very exceptions	Inconsistency among results of studies with strong design, OR consistency with minor exceptions across studies of weaker design	Unexplained inconsistency among results from different studies, OR single study unconfirmed by other studies	Conclusion supported solely by statements of informed nutrition or medical commentators	NA
Quantity • Number of studies • Number of study participants	One large study with a diverse population or several good quality studies Large number of subjects studied Studies with negative results have sufficiently large sample size for adequate statistical power	Several studies by independent investigators Doubts about adequacy of sample size to avoid Type I and Type II error	Limited number of studies Low number of subjects studied and/or inadequate sample size within studies	Unsubstantiated by published research studies	Relevant studies have not been done
Impact • Importance of studied outcomes • Magnitude of effect	Studied outcome relates directly to the question Size of effect is clinically meaningful Significant (statistical) difference is large	Some doubt about the statistical or clinical significance of the effect	Studied outcome is an intermediate outcome or surrogate for the true outcome of interest OR size of effect is small or lacks statistical and/or	Objective data unavailable	Indicates area for future research

			clinical significance		
Generalizability • Generalizability to population of interest	Studied population, intervention and outcomes are free from serious doubts about generalizability	Minor doubts about generalizability	Serious doubts about generalizability due to narrow or different study population, intervention or outcomes studied	Generalizability limited to scope of experience	NA

Criteria adapted from the American Dietetic Association Evidence Analysis Library® and based upon: Greer N, Mosser G, Logan G, Wagstrom Halaas G. A practical approach to evidence grading. The Joint Commission Journal on Quality Improvement. 2000;26:700-712. Explanation of Grades and Grading Chart